



## Pensacola Community Redevelopment Agency

CRA Sidewalk and ADA Accessibility Street Revitalization Projects

A Street, DeVilliers Street, Reus Street

### Agenda

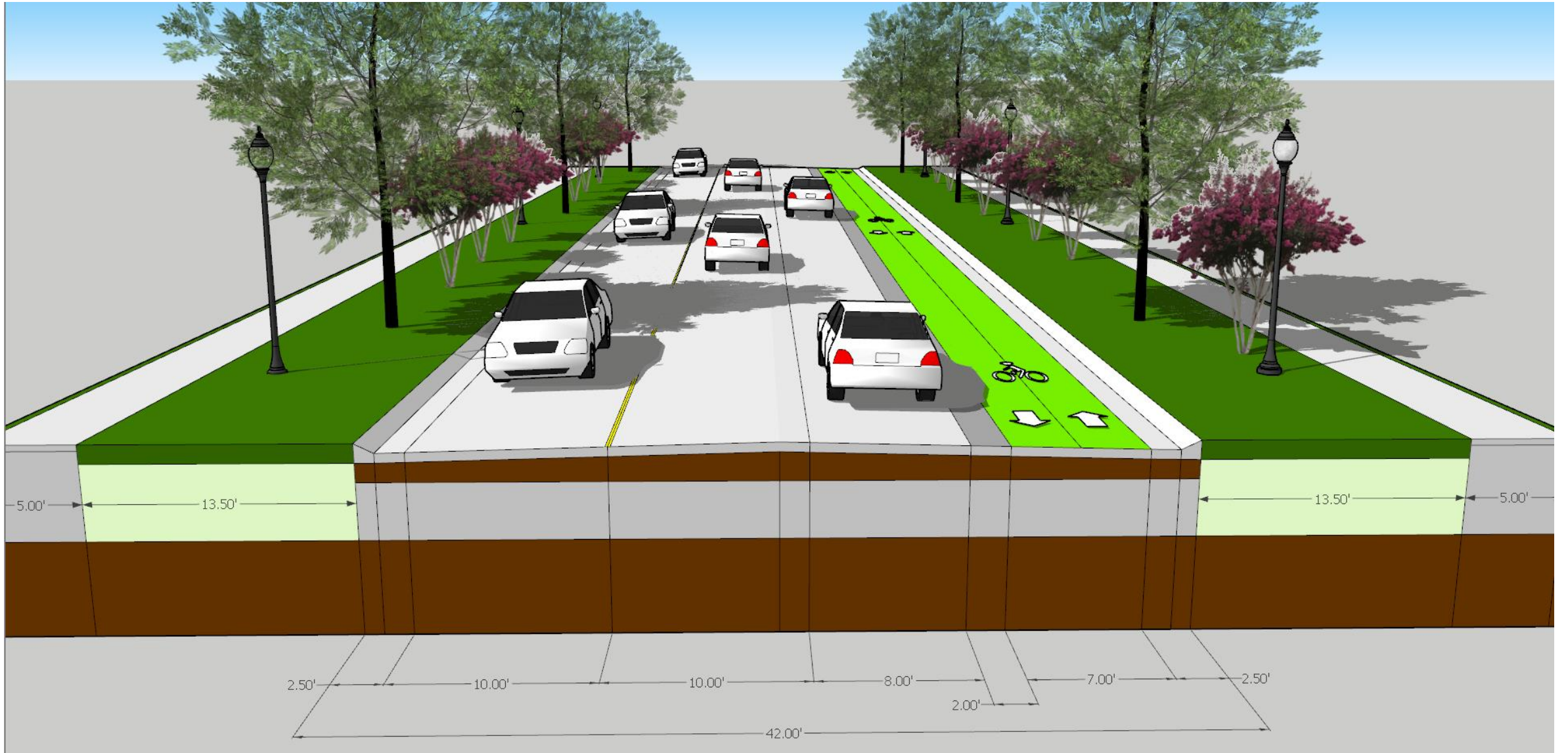
Public Meeting March 19, 2019

1. Introductions
2. CRA Project Goals
3. Why were these streets chosen?
4. Scope of work for revitalization
5. Digital tour of DeVilliers Street and A Street
6. What are the issues, constraints, and opportunities for revitalization?
  - Limitations within the right-of-way
  - Cost limitations
  - Utility conflicts
  - Driveway access and
  - ADA universal access
  - Parking
  - Transit access
7. Multi-modal approaches to use
8. Previous and current public comment
9. Schedule

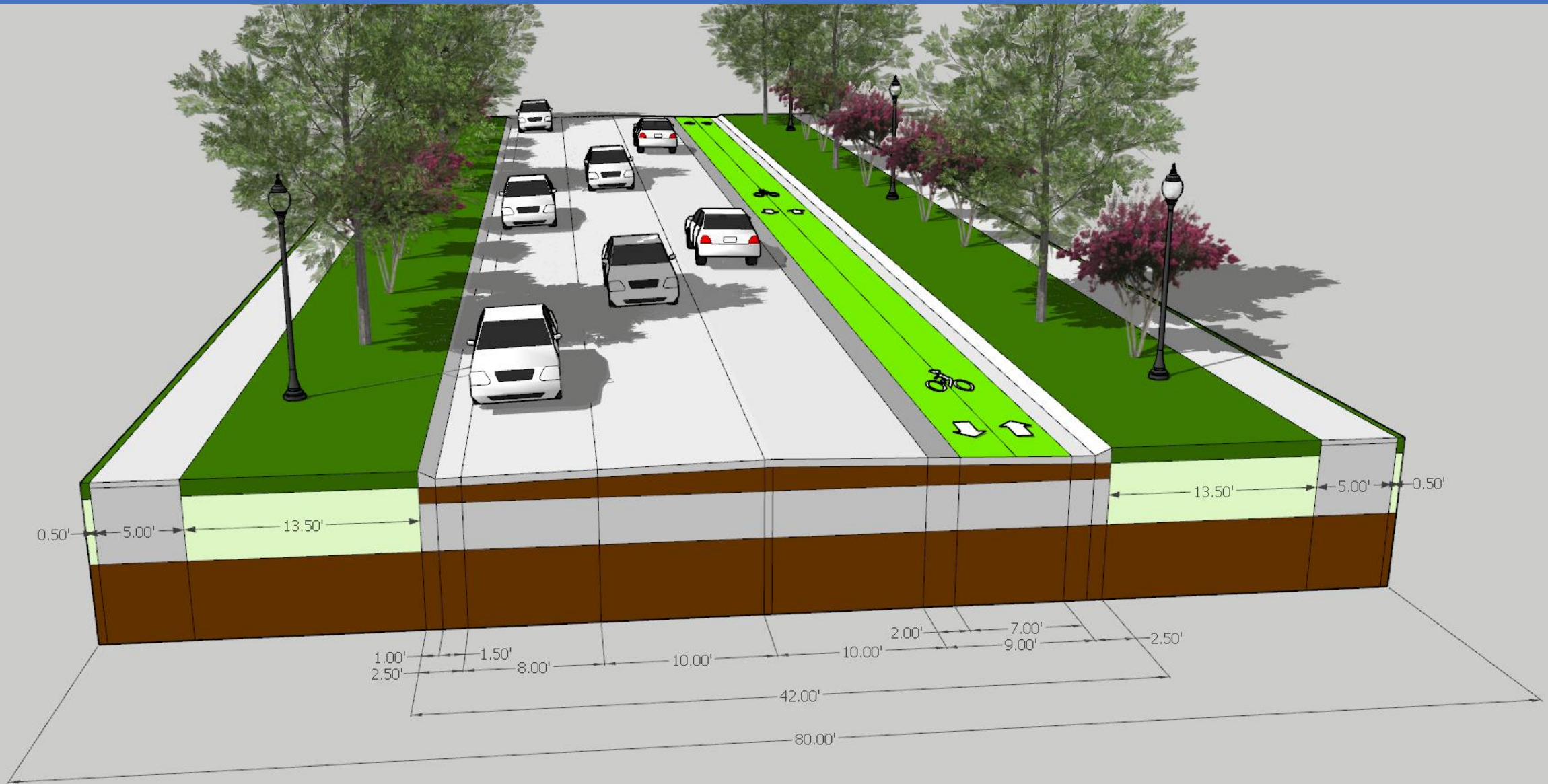
**Question:** What can be done for these corridors to revitalize,  
make them more attractive for redevelopment,  
and make them more suitable multi-modal corridors?

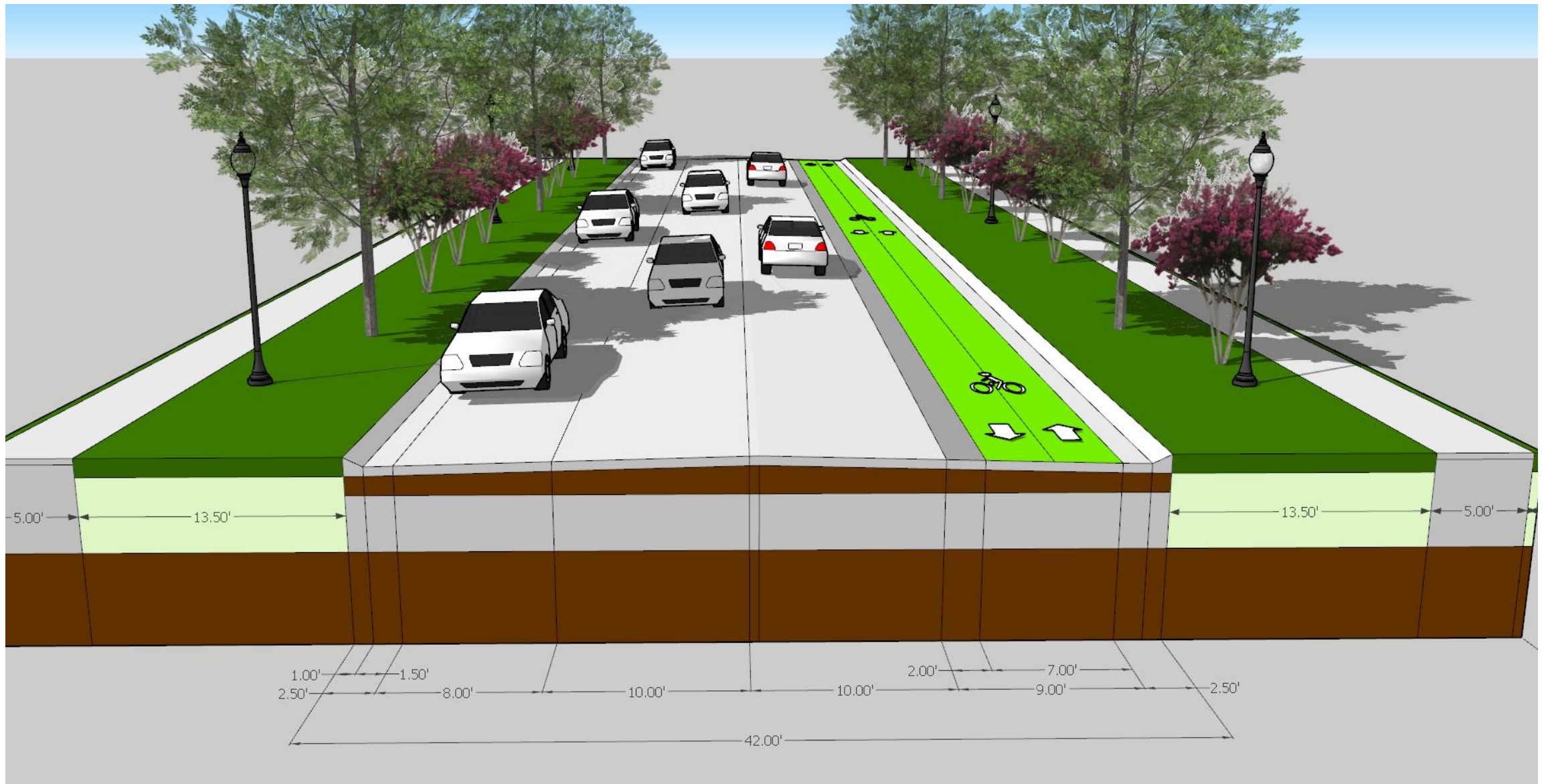
**Answer:** Let's take a look.



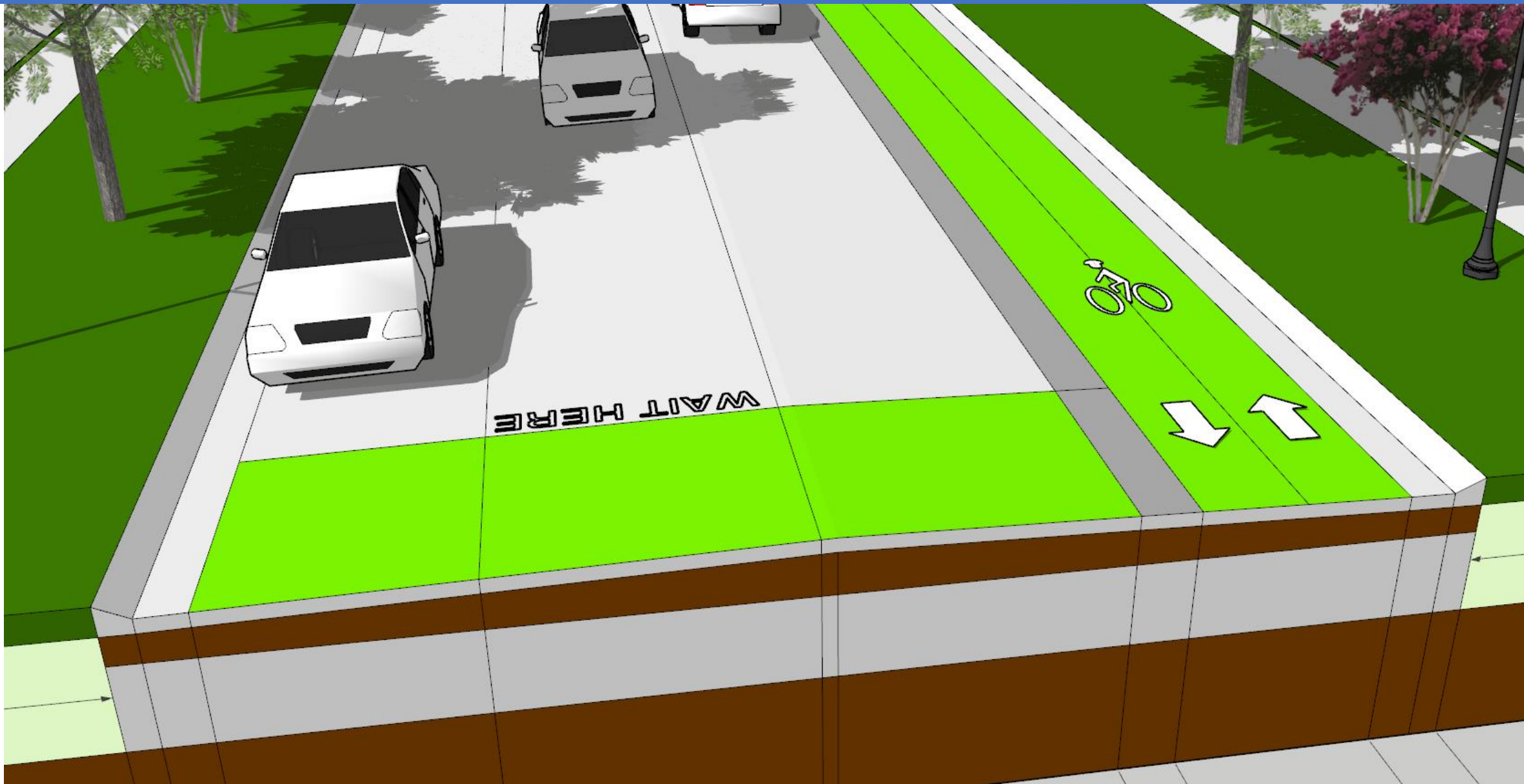




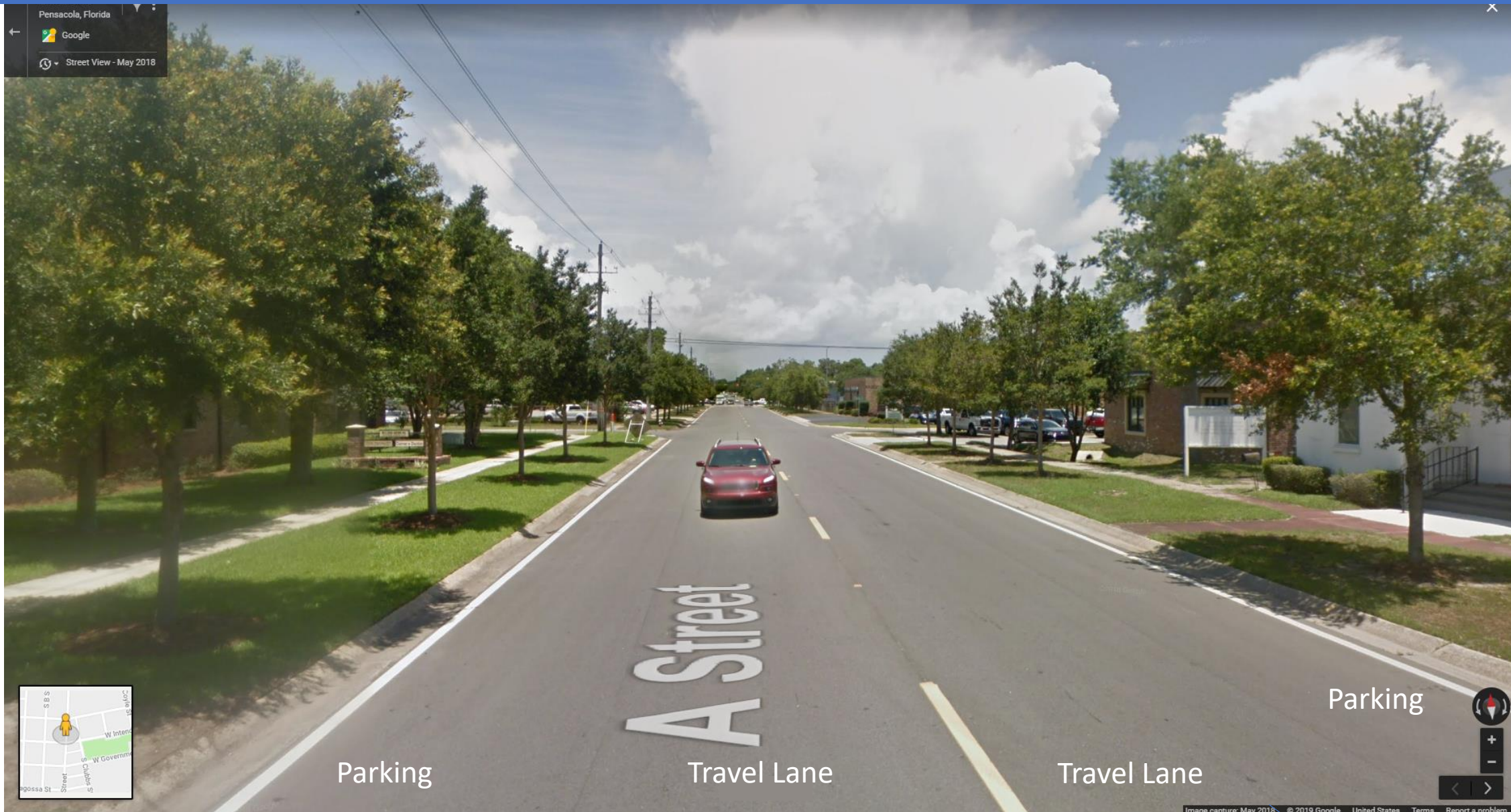




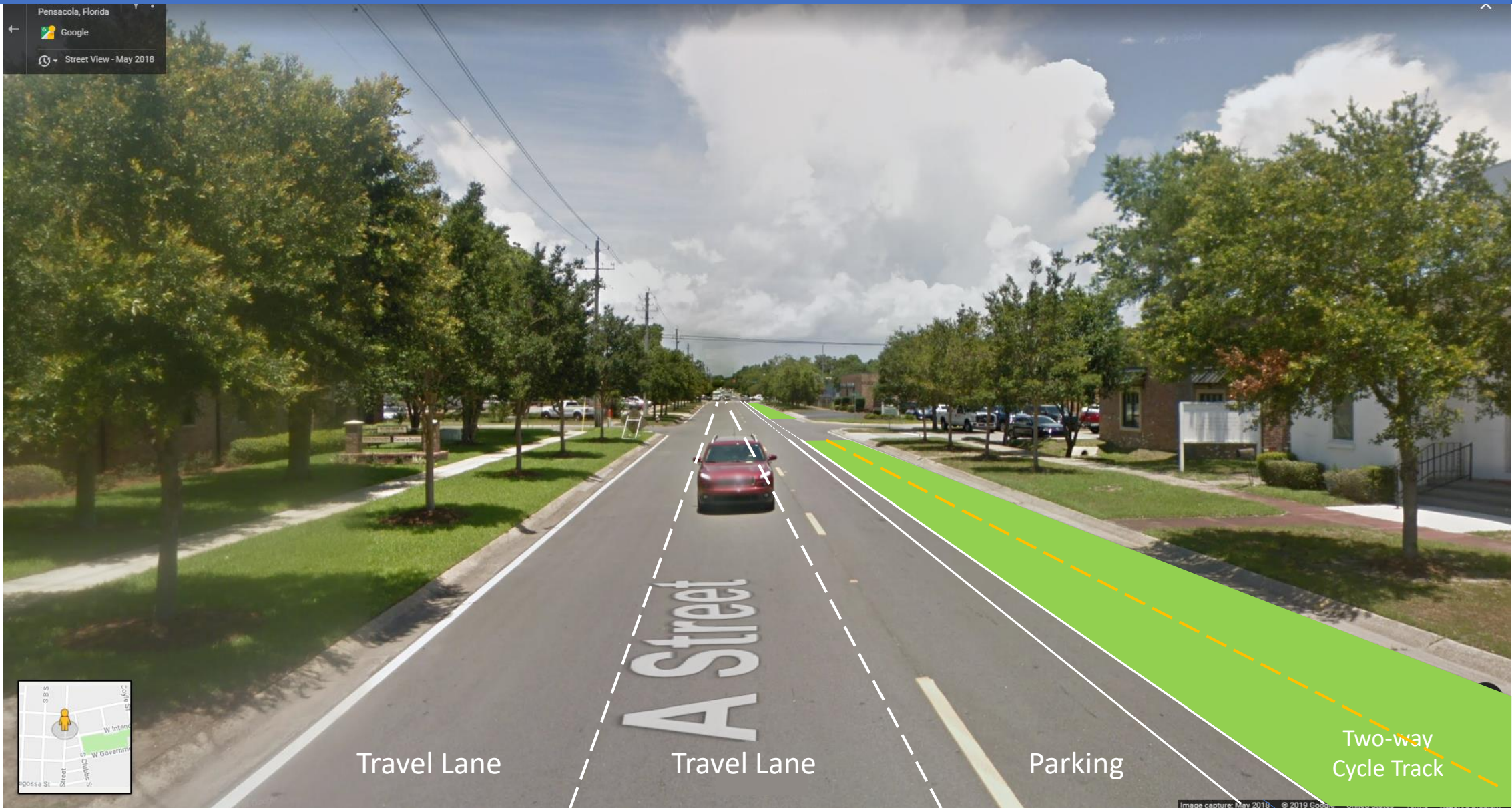




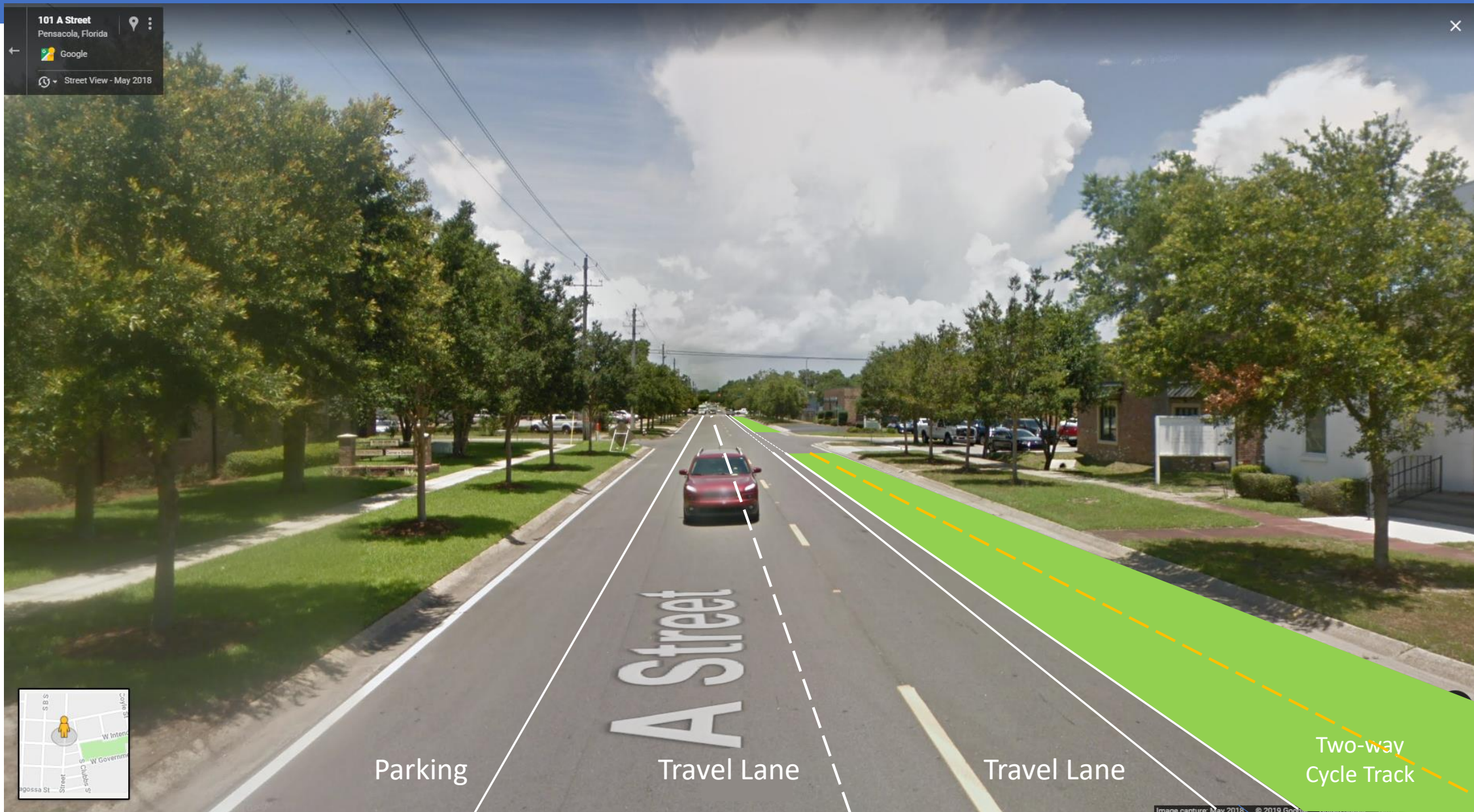










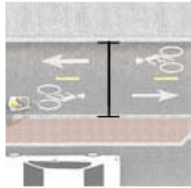




Question: Has this been done before?

Answer: Yes. All across the U.S. Examples follow from NACTO  
and from Los Angeles and the UCLA campus.

## RECOMMENDED



The desirable two-way cycle track width is 12 feet. Minimum width in constrained locations is 8 feet.

Rush hour intensities (two directions, bikes per hour)	Cycle Track Width (feet)
0 - 150	6.5
150 - 750	10
> 750	13

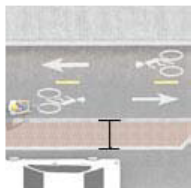
CROW. (2006). Record 25: Design Manual for Bicycle Traffic. CROW, The Netherlands.

	Desirable minimum width (m) (see note 1)	Absolute minimum width (m) (see note 1)	Safety strip to carriageway kerb edge minimum width (m) (see note 2)
One Way	2.0	1.5	0.5
Two Way	3.0	2.0	0.5

### Notes:

- 0.5m should be added for each side of the track that is bounded (e.g. by a wall, railings fence or hedge)
- Safety strip to carriageway kerb edge minimum width should be 1.0m adjacent to frequently accessed parked cars

Transport for London. (2005). London Cycling Design Standards.



When protected by a parking lane, 3 feet is the desired width for a parking buffer to allow for passenger loading and to prevent dooring collisions.

**“Safety strip to carriageway kerb edge minimum width should be 1.0m adjacent to frequently accessed parked cars.”**

Transport for London. (2005). London Cycling Design Standards.



A dashed yellow line should be used to separate two-way bicycle traffic and to help distinguish the cycle track from any adjacent pedestrian area.

## RECOMMENDED (CONTINUED)



Driveways and minor street crossings are a unique challenge to cycle track design. A review of existing facilities and design practice has shown that the following guidance may improve safety at crossings of driveways and minor intersections:

- If the cycle track is parking protected, parking should be prohibited near the intersection to improve visibility. The desirable no-parking area is 30 feet from each side of the crossing.

**“Parking must be banned along the street with the bike path for a distance long enough to ensure adequate stopping sign distances for motorists crossing the path.”**

Velo Quebec. (2003). Technical handbook of bikeway design. 2nd ed. Quebec: Ministère des Transport du Québec and the Secrétariat au Loisir et au Sport.

- For motor vehicles attempting to cross the cycle track from the side street or driveway, street and sidewalk furnishings and/or other features should accommodate a sight triangle of 20 feet to the cycle track from minor street crossings, and 10 feet from driveway crossing.
- Color, yield lines, and “Yield to Bikes” signage should be used to identify the conflict area and make it clear that the cycle track has priority over entering and exiting traffic.

**“Variant of MUTCD R10-15 to include helmeted bicycle rider symbol (MUTCD figure 9C-3 B). Alternate sign in common use, similar to MUTCD R1-5, 1-5a.”**



- If configured as a raised cycle track, the crossing should be raised, in which the sidewalk and cycle track maintain their elevation through the crossing. Sharp inclines on either side from road to sidewalk level serve as a speed hump for motor vehicles.

**“The results show that the paths with raised crossings attracted more than 50 percent more bicyclists and that the safety per bicyclist was improved by approximately 20 percent due to the increase in bicycle flow, and with an additional 10 to 50 percent due to the improved layout.”**

Garder, P., Leden, L., Pulkkinen, U. (1998). Measuring the Safety Effect of Raised Bicycle Crossings Using a New Research Methodology. Transportation Research Record, 1636.

## RECOMMENDED (CONTINUED)



Two-stage turn queue boxes should be provided to assist in making turns from the cycle track facility.

## OPTIONAL



Cycle tracks may be shifted more closely to the travel lanes on minor intersection approaches to put bicyclists clearly in the field of view of motorists

“ It is recommended that on roads within built-up areas ... cycle tracks are bent in 20-30 meters before an intersecting road (bending-in is defined as bending a separate cycle track toward the carriageway, with the distance between the cycle track and the side of the main carriageway measuring between 0 and 2 m).

“ Function of Bending Cycle Track In:

- Improving conspicuity of cyclists
- Improving visibility of cyclists
- Clarifying right of way situations

CROW. (2007). Design Manual for Bicycle Traffic.

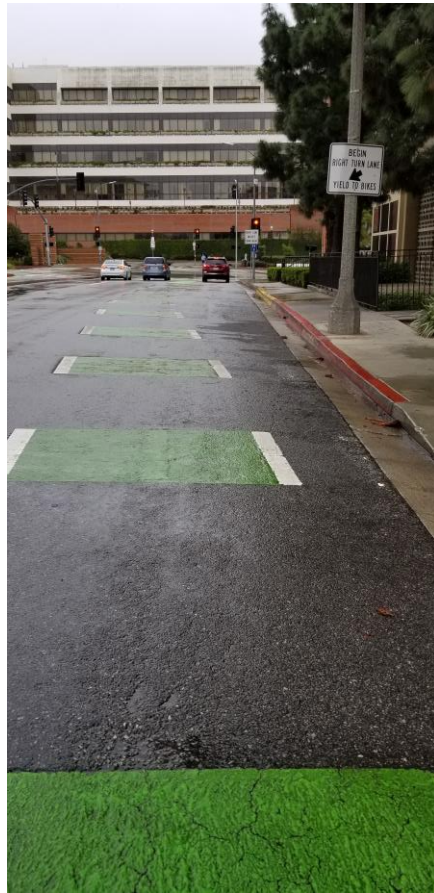


May be configured as a raised cycle track.



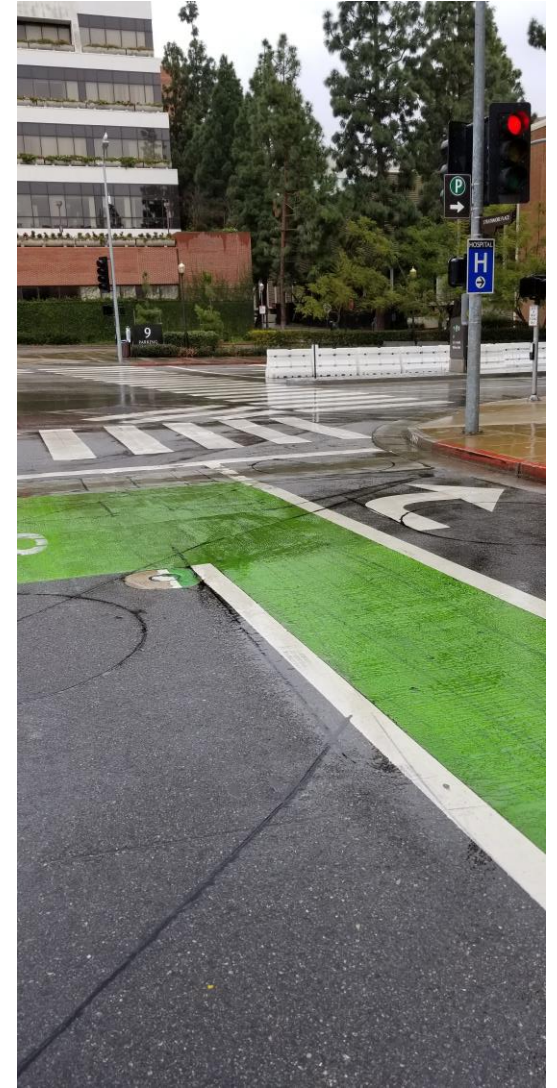
Options for buffer delineators





Issues: Alternative users and parking in the bike box





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## UCLA Bicycle Lanes and Users





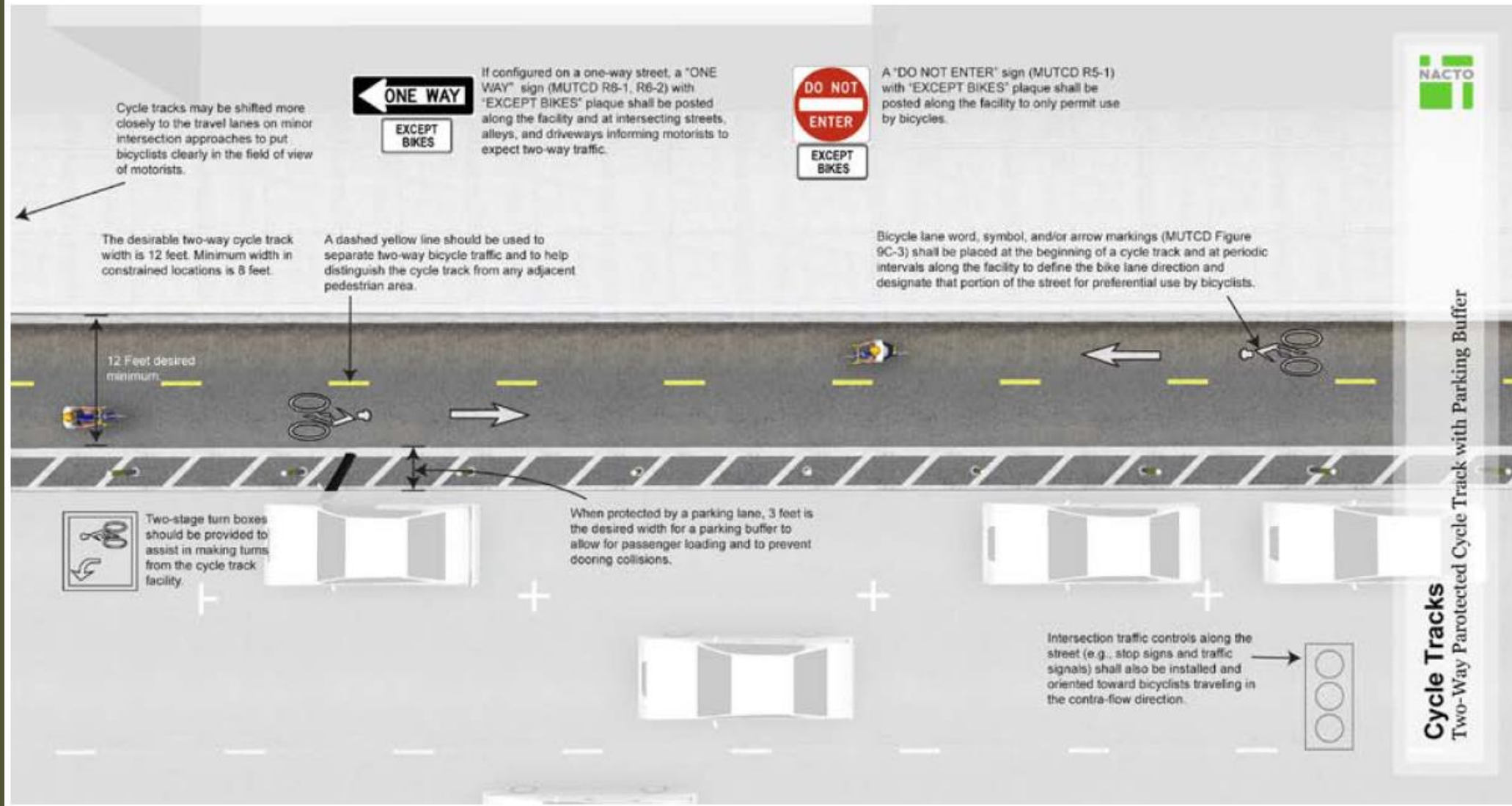
Issues: Conflicts with transit vehicles

## UCLA Bicycle Lanes and Users



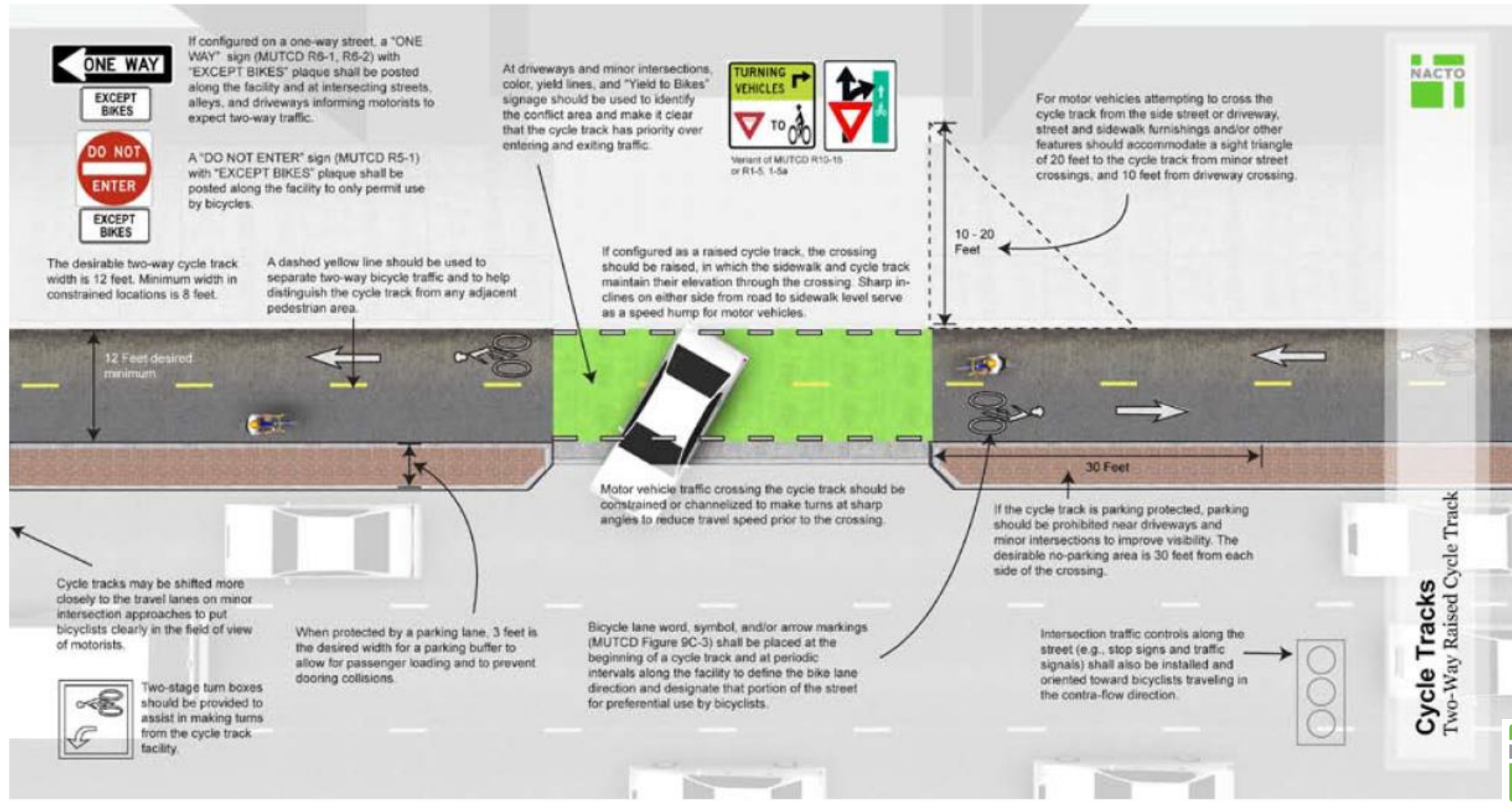


# Design Guidance



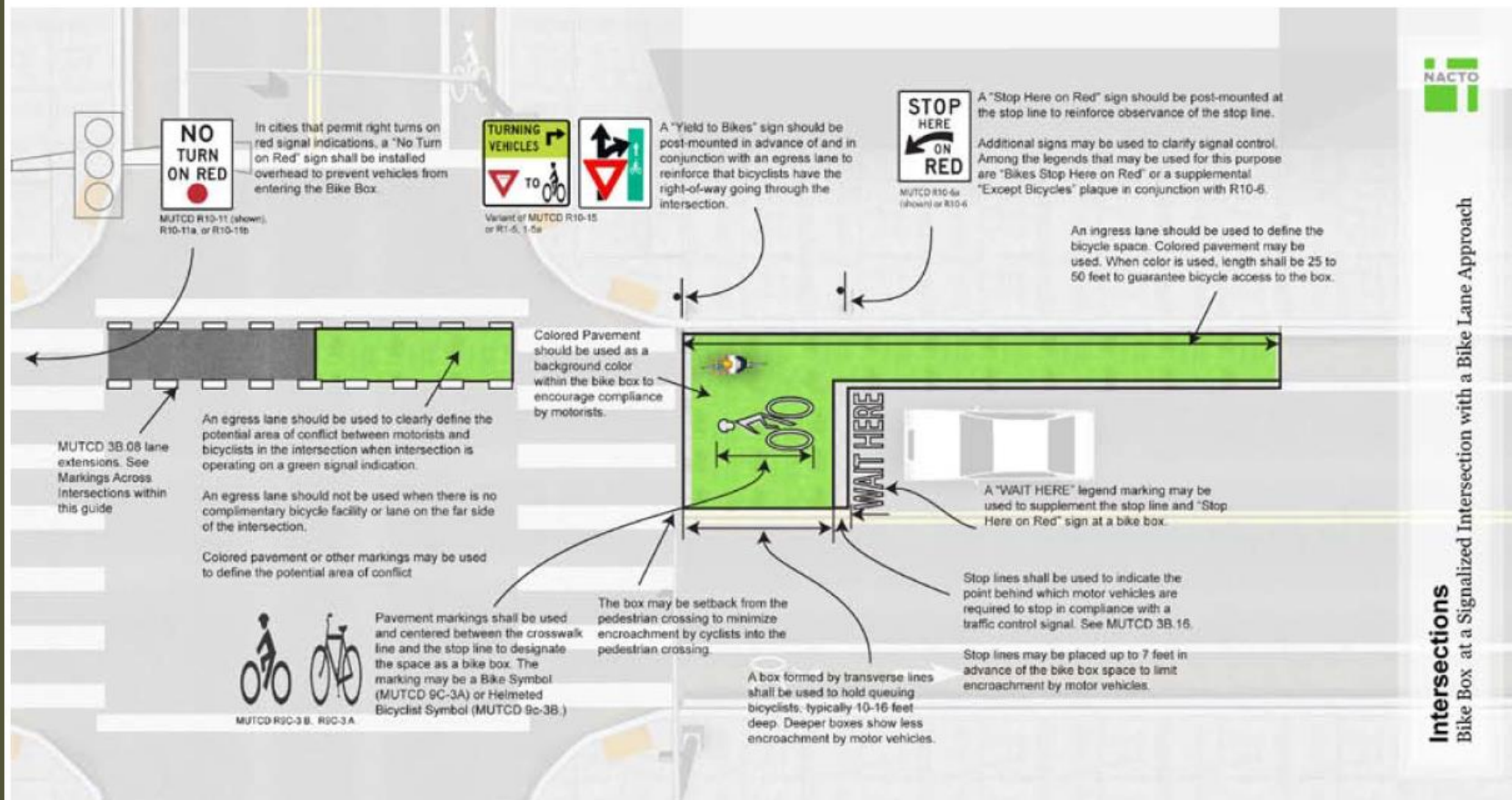


# Design Guidance





# Design Guidance



**Intersections**  
Bike Box at a Signalized Intersection with a Bike Lane Approach



National Association of  
City Transportation Officials

